fragments were observed as shown in FIG. 2(b). However, when the genomic DNA of normal bovine was used as a template, no amplification was observed.

These results reveal that with respect to the deficiency of approximately 11 kb including the translated region of Hsp70 gene, the mother or daughter bovine of the deficiency-attacked bovine is a heterozygote to this mutation and the Hsp70 deficiency is a hereditary disease with autosome recessive heredity.

SEQUENCE LISTING

<110> Japan Livestock Technology Association

<120> Gene Diagnosis for Bovine Hsp70 Deficiency

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<223> Description of Artificial Sequence: Oligonucleotide to
act as a primer for PCR

<400>2

aaccccatca tcagcagact   20

<210>3

29

<211>21

<212>DNA

<213>Artificial Sequence

<223> Description of Artificial Sequence: Oligonucleotide to act as

 a primer for PCR

<400>3

cacagaagca aacatcactc g   21

<210>4

<211>20

<212>DNA

<213>Artificial Sequence

<223> Description of Artificial Sequence: Oligonucleotide to act as a primer for PCR

<400>4

gcattgccca taaaggaaga   20

<210>5

<211>20

<212>DNA

<213>Artificial Sequence

<223> Description of Artificial Sequence: Oligonucleotide to

act as a primer for PCR

<400>5

tggaaggtga gaaaggttgg   20

<210>6

<211>19

<212>DNA

<213>Artificial Sequence

<223> Description of Artificial Sequence: Oligonucleotide to

act as a primer for PCR

<400>6

acgtcgttga tcctgtggg   19

<210>7

<211>19

<212>DNA

<213>Artificial Sequence

<223> Description of Artificial Sequence: Oligonucleotide to

act as a primer for PCR

<400>7

tatctcggag ccgaaaagg   19

<210>8

<211>29

<212>DNA

<213>Artificial Sequence

<223> Description of Artificial Sequence: Oligonucleotide to

act as a primer for PCR

<400>8

ggtctactac agacagacaa aaagtaagg   29